

Table 1: Proton Driver Parameters of Present and Phase I (7/5/00)

	Present	Stage 1 (MI)	Stage 2 (MI+ ν -fact)
Linac (operating at 15 Hz)			
Kinetic energy (MeV)	400	400	400
Peak current (mA)	40	60	60
Pulse length (μ s)	25	90	90
H^- per pulse	6.3×10^{12}	3.4×10^{13}	3.4×10^{13}
Average beam current (μ A)	15	81	81
Beam power (kW)	6	32	32
Booster (operating at 15 Hz)			
Extraction kinetic energy (GeV)	8	12	16
Protons per bunch	6×10^{10}	2.4×10^{11}	1.7×10^{12}
Number of bunches	84	126	18
Total number of protons	5×10^{12}	3×10^{13}	3×10^{13}
Normalized transverse emittance (mm-mrad)	15π	60π	60π
Longitudinal emittance (eV-s)	0.1	0.1	0.4
RF frequency (MHz)	53	53	7.5
Extracted bunch length σ_t (ns)	0.2	3	3
Average beam current (μ A)	12	72	72
Target beam power (MW)	0.1	0.9	1.2